

We claim:

1. A receiving apparatus capable of receiving digital broadcast signals of plural channel frequency allocation patterns, the apparatus comprising:

an input unit to which the digital broadcast signals are inputted;

a decision unit which starts channel selection at a signal of a channel of a preset frequency and determines the channel frequency allocation pattern of the digital broadcast signal inputted to the input unit; and

a channel list preparation unit which scans plural channels on the basis of the frequency corresponding to the channel frequency allocation pattern determined by the decision unit and stores information on the plural channels.

2. The receiving apparatus as claimed in claim 1, wherein the decision unit has a demodulator unit and judges the channel frequency allocation pattern in accordance with whether or not the inputted signal can be demodulated at the frequency of the channel frequency allocation pattern.

3. The receiving apparatus as claimed in claim 1, wherein the channel frequency allocation pattern is one of the group consisting of STD, IRC and HRC used for cable digital broadcast in the United States.

4. The receiving apparatus as claimed in claim 1, wherein the preset frequency is a frequency of 550 MHz or higher.

5. The receiving apparatus as claimed in claim 1, wherein the preset frequency is a frequency of 550 MHz or higher and 750 MHz or lower.

6. The receiving apparatus as claimed in claim 2, wherein the decision unit starts channel selection at a signal of a channel of a preset or higher

frequency, and when demodulation is not possible in the frequency of any of the channel frequency allocation patterns, demodulation is performed in a channel of a higher frequency.

7. The receiving apparatus as claimed in claim 1, further comprising an amplifier unit which amplifies a signal inputted at the input unit, wherein it is judged whether the inputted signal has a receivable level or not, using AGC voltage in the amplifier unit.

8. The receiving apparatus as claimed in claim 7, wherein when it is judged using AGC voltage in the amplifier unit that the inputted signal is receivable, the decision unit starts an operation to decide the channel frequency allocation pattern, and when it is judged that the inputted signal is not receivable, the decision unit starts testing another channel for selection.

9. The receiving apparatus as claimed in claim 1, further comprising an extractor unit for extracting program information included in a digital broadcast signal,

wherein the channel list preparation unit stores the program information extracted by the extractor unit as information on the channel.

10. The receiving apparatus as claimed in claim 9, wherein the program information includes one of the group consisting of virtual channel number, modulation mode, channel TS-ID, and program number.

11. The receiving apparatus as claimed in claim 1, wherein when one of the channel frequency allocation patterns is decided in a certain channel by the decision unit, channel information of that channel is stored into the channel list preparation unit.

12. The receiving apparatus as claimed in claim 1, further comprising a display unit which displays a received digital broadcast signal, wherein the display unit displays the channel information prepared by the channel list preparation unit.

13. A receiving method for receiving digital broadcast signals and preparing a channel list, the method comprising:

a channel selection step of selecting a channel of a signal having a higher frequency than a predetermined frequency;

a decision step of deciding of which channel frequency allocation pattern the digitally broadcast signal of the frequency selected at the channel selection step is;

a channel scanning step of scanning plural channels using the channel frequency allocation pattern determined at the decision step; and

a channel information storage step of storing information on each channel obtained in the channel scanning step.

14. The receiving method as claimed in claim 13, wherein at the decision step, the channel frequency allocation pattern is decided in accordance with whether or not the signal whose channel has been selected can be demodulated at the frequency of the channel frequency allocation pattern.

15. The receiving method as claimed in claim 13, wherein the channel frequency allocation pattern is one of the group consisting of STD, IRC and HRC used for cable digital broadcast in the United States.

16. The receiving method as claimed in claim 13, wherein the predetermined frequency is 550 MHz.

17. The receiving method as claimed in claim 13, wherein at the decision step, channel selection is started at a signal of a channel of a predetermined or higher frequency, and when demodulation is not possible in the frequency of any of the channel frequency allocation patterns, demodulation is performed in a channel of a higher frequency.

18. The receiving method as claimed in claim 13, further comprising an extraction step of extracting program information included in a digital broadcast signal,

wherein at the channel information storage step, the program information extracted at the extraction step is stored as information on the channel.

19. The receiving method as claimed in claim 18, wherein the program information includes one of the group consisting of virtual channel number, modulation mode, channel TS-ID, and program number.

20. The receiving method as claimed in claim 13, further comprising a display step of displaying a received digital broadcast signal,

wherein at the display step, the information on the channel stored at the channel information storage step is displayed.